

Program Report

Virginia Resource-Use Education Council
Spring Meeting

May 24, 2007
Martinsville, VA



The Virginia Resource-Use Education Council coordinates projects aimed at conservation education within the Commonwealth of Virginia.

Established 1952

History of the Virginia Resource-Use Education Council



1952 – The Director of CGIF Mr. Quinn called together representatives from the various natural resource agencies, the Dept of Public Instruction and several colleges. The first project the newly formed Council took on was the publication and distribution of the booklet “***A Look at Virginia's Natural Resources***” 25,000 copies were distributed to Elementary schools statewide.

1956 – The Council began the first “**Conservation Short Course**” at VPI with 29 educators. The teachers spent 3 weeks learning about all aspects of natural resources. The Course was divided into small 2-3 day sessions followed by an exam. A typical session covered all aspects of a resource along with one or more field trips. A representative of a resource agency taught each topic.

The course rapidly expanded to William and Mary, Virginia State University, Longwood and several other universities. Teachers spent the 3 weeks on campus, receiving full or partial scholarships from the Council.

Due to declining enrollment and changes in the teacher re-certification process the Council decided to discontinue the course in 1993.

1964 – Governor Harrison with the VRUEC invited over 3,000 citizens to attend a conference on the future of conservation education in Virginia. 1,200 citizens met at the John Marshall Hotel here in Richmond to discuss ways to increase conservation and stewardship among Virginians.

During the 60's the Council produced two 16mm films on Virginia. These were available on loan from the Department of Education and several other agency loan libraries. The films were also shown on PBS across the Commonwealth.

1975 – The booklet “***Virginia Natural Resources***” was updated and sent to all the schools in Virginia. The booklet was again updated and distributed in 1999, renamed the “***Virginia's Natural Resources Education Guide***” it is currently available on the Virginia Naturally web site.

1995 – The Council collaborates on an ***Environmental Education Directory*** that currently exists on the Virginia Naturally Web Site.

1998 - Council receives Litter grant and produces ***Pollution Solutions*** – holding teacher workshops statewide and training hundreds of teachers in waste management and pollution prevention and dozens of local litter and recycling coordinators in EE.

2000–VRUEC is recognized by the General Assembly to serve as staff for the newly created Virginia Naturally Environmental Education Advisory Committee. The Council is also named as the interagency work group for the recently signed Chesapeake Bay Agreement.

2002 – In an effort to assist teachers in meeting Bay educational goals, the Council partners with natural resource agencies, NOAA and the VEE to establish and administer a small classroom grant program.

2003 – Council receives a NOAA grant to offer a one-week teachers' course on the Chesapeake Bay to help teachers meet the educational goals of the Bay Agreement.

2005 – The council expands its efforts to include a headwaters course on the Chesapeake Bay Watershed. The 2 Bay Academies reach over 50 teachers. To assist teachers in providing a Meaningful Watershed Educational Experience (MWEE) the Council award over \$50,000 in classroom grants to schools.

2006 – Survey of Virginia School Systems shows that 80% of schools are meeting their MWEE goals. A survey for the Virginia Outdoors Plan is being sent to partners. Member agencies are continuing to support MWEE and other goals in the Environmental Education Business Plan.

Virginia Resource-Use Education Council

Guiding Principles



- That the natural resources of the state and nation should be used wisely and with due consideration for the future.
- That the wise use of these resources should be the concern of government at the local, state, and national levels.
- That all people benefit from the natural resources of the state and nation: hence, they have citizenship responsibility in the safeguarding and judicious utilization of these resources.
- That all citizens, public or private groups, charged with the management of natural resources or education or both, have added responsibilities in promoting understanding of conservation needs problems and ways to resolve them.

The membership of the VRUEC is made up of representatives of state and federal natural resource agencies, nonprofit natural resource organizations, the State Department of Education, and institutions of higher learning concerned with conservation education.

Current officers:

- Chair - Suzie Gilley, Dept. of Game and Inland Fisheries
- Vice Chair – Barry Fox, Virginia State University
- Secretary – Lisa Deaton, Dept. of Forestry
- Treasurer – Ann Regn, Dept. of Environmental Quality

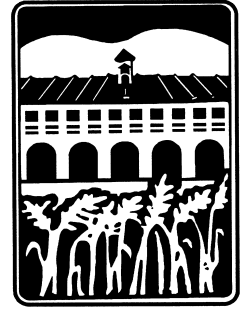
Our thanks and appreciation to the agencies mentioned above and to all member agencies for their continued support of the Council and their representatives.

Business Plan Actions: To increase the number of new partner organizations; communicate with partners; host an annual EE conference for non-formal, community-based educators; develop regional networks, to increase stewardship by 10%; and promote professional development opportunities, grant funding and EE resources.

Reporting period: Jan. 1- Dec. 31, 2006

- **110** organizations signed up as **new partners** during this calendar year.
- **Twelve** electronic newsletters sent out to partner base of over 1,000.
- Website statistics report **57,720** website "hits" with **9,593** downloads.
- New online searchable **partner database** being updated and will launch in June 2007.
- Training provided to 847 community educators at 24 training workshops; coordination, public information and resources provided to 2,384 people at 14 outreach events.
- 143 educators attended *Racing to Improve the Environment 2006 Virginia EE conference and 2nd partner meeting* at W.E. Skelton 4-H Education Conference Center at Smith Mountain Lake. Top features of the conference include: networking, diversity of workshop sessions, conference location, trying for zero waste and resources. Suggested future topics: see more on citizenship and conservation, global warming, alternative energy sources.
- In 2007, the Virginia Office of Environmental Education (VOEE) and the Virginia Resource Use Education Council (VRUEC) will work with the North American Association for Environmental Education (NAAEE) to provide topics at annual conference "Explore New Horizons for Environmental Education" to be held November 14-17, 2007 in Virginia Beach, VA. www.naaee.org/conference/2007
- Eight regional groups/teams/alliances for environmental organizations are underway.
- Fifteen (15) VaNaturally partner organizations received **state, national and local awards** such as Environmental Excellence, Keep Virginia Beautiful, Keep America Beautiful and Virginia Naturally.
- Two rounds of micro **Classroom Grants** were awarded to **97** schools which received **\$67,850** grant funds. First round of MWEE Minigrants for Partners were awarded to **9** community organizations which received **\$19,200**.
- **25 schools** earned recognition as a Virginia Naturally School for their efforts during the 2005-2006 school year.
- 3,000 **Love-A-Tree** kits developed and distributed. The 2006 theme was : *Virginia's Natural Resources: Then and Now...1607-2007*
- **Stewardship VA** reported **6,091** volunteers received certificates for **171** projects registered during Spring Campaign and **4,550** Campaign and 2,266 volunteers received certificates for 145 projects registered during the Fall Campaign

Blandy Experimental Farm &
The State Arboretum of Virginia
University of Virginia
400 Blandy Farm Ln.
Boyce, VA 22620



VRUEC Member

Candace Lutzow-Felling, Director of Education, 540/837-1758; lutzow-felling@virginia.edu

Anticipated: Director of Public Programs (to be hired summer, 2007)

Major Educational Efforts

- On-site school programs for K-12 students: insuring alignment with state SOL's and revising programs based on an internal evaluation of learning goals and objectives
- Changing school program delivery from solely staff-led to joint staff- and teacher-led
- Developing new hands-on, inquiry-based environmental education programs (with a focus on weather)
- Staff professional development
- Increased outreach to high school students and teachers
- Amateur Naturalist program: a natural history work book designed for adult and child visitors to complete together; includes activities for all four seasons
- Young Naturalist program: Saturday programs during the winter months designed to encourage children to explore nature in the winter
- Summer Camp: Outdoor-based, half-day, week-long environmental science explorations for children aged 6-14; three week-long programs are offered

MWEE Efforts

- Grade K-5 experiences: SOL-based school programs include "Use Some Sense" develops nature observation skills; "Wild Things!" introduces students to native fauna; "Mammals!" explores native mammal behavior and mammal habitats; "Snake Savvy" teaches snake appreciation, identification and behavior; "It's for the Birds" investigates bird adaptations; "Virginia Natives" explores native flora and the ecology of native ecosystems; "Flower Functions" explores floral structure and the relationship to pollinators; "Scoop on Soils" investigates soil types and functions; "Rocks Talk" explores Virginia geology and rock identification; "Water Wonders" measures and analyzes water quality factors; "Arbor Sleuth" explores tree structure and classification
- Grade 6-8 experiences: SOL-based school programs include "Water Wonders" (described above); "Arbor Sleuth" (described above); "Young Ecologists" in depth examination of a habitat including its biotic and abiotic elements; "Water Quality Technology" introduces water quality measurement and analysis technology; "Science Explorations" facilitates student-directed field ecology research
- Grade 9-12 experiences: Involving high school students in multiple day or year-long field ecology research projects at Blandy

Numbers Reached

- Adults: 20
- Children/students: > 4300

Upcoming Projects

- Building an outdoor classroom to accommodate up to 24 students
- Presenting a workshop at the Botanical Society of America annual conference in Chicago to help teach scientists how to share their knowledge and skills with K-12 learners
- Nurturing a budding partnership between Blandy and the Clarke County High School Bridge Program; junior and senior high school students will participate in field ecology research projects at Blandy
- Hiring and mentoring a Director of Public Programs who will develop and administer education programs for the general public (non-school programs) including children and adults

- Writing a grant proposal to promote partnerships between UVa environmental science graduate students and middle school science teachers in the five county region neighboring Blandy
- Participating in hosting and teaching Virginia Master Naturalist certification classes

Plans to encourage children and adults to get outside

- Continue to promote our school programs
- Continue our Young Naturalist, Amateur Naturalist, and Summer Camp programs
- Continue to develop field ecology research opportunities for high school students at Blandy
- Develop our teacher professional development offerings

Challenges

- Facility, staff, and funding limitations
- Convincing teachers and administrators that environmental education field trips do not take time away from SOL teaching
- Circumventing SOL restrictions to provide MWEE's to all students in the northern Shenandoah Valley area
- Encouraging teachers to schedule field trips

Department of Conservation and Recreation

203 Governor St.

Richmond, VA 23219



VRUEC Members

Carol Zokaite, Karst Education Coordinator

Major Educational Efforts

- Project Underground – Karst Education on Water, Geology and Biology
- Your Backyard Classrooms – Activities for Park and Schoolyard Use
- State Park Education Programs – Interpreters working with school groups

MWEE Efforts

- Working with teachers and schools in partnership with State Parks

Numbers Reached

- Adults – 1475
- Children/students 43,489

Upcoming & Ongoing Projects

- Project Underground -Teacher training programs
- Your Backyard Classrooms – Teacher training and school programs
- Chesapeake Bay Academy - Mountain
- Conservation Lands poster

Plans to encourage children and adults to get outside

- Interpretive and educational programs at State Parks and Natural Area Preserves
- Hiking, Boating and other activities at State Parks
- Stewardship Virginia program participation

Challenges

- Funding

VRUEC Members

Paula J. Klonowski, Science Coordinator, 804/371-0249
Barbara Young, Science Specialist, 804/225-2676

Major Educational Efforts

- Geospatial Instructional Applications Initiative (GIAI)
- Virginia Science Standards Institute (VSSI)
- Learn and Serve Virginia (LSV): Grades 6-12 School-Based, Environmental Service-Learning Grants Program

MWEE Efforts

- Learn and Serve Virginia grants have provided \$280,000 in grant funding to 12 different school divisions to implement service learning projects focused on MWEEs for 2006-07
- Provided funding support for VSSI for professional development for 4th and 5th grade teachers, which includes activities related to MWEE
- Tracking of MWEE statistics at the K-12 level

Numbers of Students Reached

- Adults: ~200
- Children/students: ~12,225

Upcoming Projects

- LSV will be funded at the same rate for 2007-08
- Provide funding support for Chesapeake Bay Academies for professional development for middle and high school teachers on implementing MWEE in their classrooms in June 2007
- Provided funding support for VSSI for professional development for 4th and 5th grade teachers, which includes activities related to MWEE

Challenges

- Dedicated funding sources
- Increasing awareness of MWEE goal and resources among Superintendents, administrators and classroom teachers due to turnover and competing demands



VRUEC Members

Ellen Powell, Conservation Education Coordinator – 434/220-9083

Lisa Deaton, Project Learning Tree Coordinator – 804/328-3031

- **Major Educational Efforts**

Major educational efforts: VDOF began offering training sessions to field staff to help them become more effective educators and to provide them with tools for educational programs. Virginia Project Learning Tree (PLT) had its most successful year ever last year. The Department's tree identification guide has been completely rewritten, and additional written materials and displays with appropriate conservation messages are being developed. The agency continues to work at creating educational opportunities on Virginia's State Forests.

- Project Learning Tree - In 2006, 1372 educators received training at 81 PLT workshops. In addition, 33 new facilitators were trained. This was our first full year of serving pre-service teacher programs, and 477 new educators attending ten colleges and universities learned how to use PLT and EE effectively with their future students.
- Holiday Lake Forestry Camp – Sixty-five youth and 3 teachers attended camp in 2006. They experienced hands-on learning in topics such as forest ecology, forest management, environmental protection, and wildlife. They also learned practical applications such as forest measurement, identification, and management techniques.
- Landowner Education – VDOF foresters educate landowners nonformally, by meeting with them to discuss forest management options, and by developing stewardship plans that address landowners' goals. VDOF continued working with VSU, NRCS, and other partners to hold forestry tours for traditionally underserved landowners. More than 80 landowners participated in 3 tours last year. Half the participants were minority or female: two groups that tend to be under-represented among those accessing agency services.
- Partnerships – DOF partners with many agencies and organizations, from the federal to the local level. One new initiative in 2006 was training the staff of 3 State Parks (those contiguous with the 3 largest State Forests) in basic forest management. Updates on management activities within the forest are being shared with Park staff as well, so that they can keep visitors informed. An upcoming project will involve working with DEQ and DCR to provide land conservation training for staff and educators, using the Places We Live PLT module as a base.
- Youth Education - Most local foresters work with several groups of youth (schools, Scouts, FFA, 4-H, etc.) each year. For example, in Spotsylvania County, the Outdoor Classroom program brings all 4th graders in the public school system to a farm and forest property for natural resources education in the field. Other day-long events devoted to natural resources are held in many localities. Foresters also do programs in classrooms, assist with planting projects in their communities, help Scouts earn badges, and train FFA, 4-H, and Envirothon teams.
- Forest Education Centers – DOF will start two Forest Education Centers this year: one at the former New Kent Forestry Center and one at Matthews State Forest. Plans are underway to hire staff to develop educational programs and oversee facility development.
- Other State Forests – VDOF's 17 State Forests are excellent examples of healthy working forests. However, most citizens are not aware that these forests exist. VDOF continues to explore ways to develop the unique potential of individual State Forests to showcase sound forest management, water quality, and ecological diversity.

MWEE Effort

- MWEEs are a very new concept for most VDOF staff. Staff are being encouraged to work with partners in providing outdoor experiences that address MWEE goals.

Numbers Reached

- Adults - VDOF does not currently collect data to quantify the number of youth or adults reached through education. A new record-keeping system should make it easier to gather this information in future years.
- Children/students – See above.

Upcoming Projects

- Creation of interpretive trails, infrastructure, and curriculum support for New Kent's Forest Education Center and Matthews State Forest
- Continued partnership between the three largest State Forests and their contiguous State Parks
- Marketing of "leave no trace" recreational opportunities on additional State Forests
- Development of additional "fact sheets" that support youth and adult education in forestry
- Continued training of VDOF staff in educational techniques, program development, and specific curricula for youth

Plans to encourage children and adults to get outside

- As DOF staff are trained in educational techniques, they are being encouraged to take groups outdoors as often as possible. DOF is partnering with VDGIF's habitat education coordinator to offer workshops for schools, encouraging outdoor classrooms and networking with local agency personnel. State Forest and Forest Education Center efforts will center on outdoor learning experiences, including interactive trails and areas for unstructured exploration.

Challenges

- VDOF staff have diverse job responsibilities, so finding time for additional educational programming can be a challenge.

VRUEC Members

Mike Barber, State Archaeologist

Dee DeRoche, Chief Curator

Major Educational Efforts

- Co-sponsored 18th Annual Environment Virginia Symposium
- Co-sponsored APVA Preservation Virginia Annual Conference
- State Fair of Virginia exhibition in partnership with Archeological Society of Virginia in conjunction with other Natural Resources agencies
- Virginia Archaeology Month with theme of *First People: the Early Indians of Virginia*
- Produced two publications: second edition of *First People, The Early Indians of Virginia* and *A Guidebook to Virginia's Historical Highway Markers*
- Initiated Volunteer Program with archaeological collections four days per month
- Internships in Archives and Collections introduced numerous students to Historic Preservation
- Conducted various Section 106 Training Workshops
- Conducted monthly tax-credit workshops in Richmond and additional workshops in regional offices
- Published and distributed DHR's annual *Notes on Virginia*
- Participated in conferences of Virginia Consortium of Social Studies Educators, Virginia Association of Science Teachers, Society for Historical Archaeology, and Society for American Archaeology
- Participated in Museums of the Boulevard teachers' receptions
- Partnered with DCR in Jamestown Anniversary Weekend exhibition

MWEE Efforts

- None in 2007

Numbers reached (July 1, 2006 – March 31, 2007)

(DHR's figures aren't broken down by age)

- Trained through DHR programs and classes: over 2000
- Reached by DHR sponsored and co-sponsored educational activities: over 24,000

Upcoming and Ongoing Projects

- Virginia Archaeology Month 2007
- State Fair of Virginia exhibition

Plans to encourage children and adults to get outside:

- Excavation experiences open to the public at Keyser Farm (Page County) in July and at Chippokes Plantation in October
- Exhibit in Natural Resources Area at State Fair of Virginia
- Virginia Archaeology Month events such as site visits and sponsored activities at State and National Parks and other outdoor venues

Challenges:

- Obtaining sufficient funding and staff time dedicated to outreach efforts and educational programs

Keep Norfolk Beautiful
3500 A Gramny St.
Norfolk, VA 23504



VRUEC Members
Holly Carson

Major Educational Efforts

- **Talking Trash** - 2nd grade assembly in partnership with SPSA for Norfolk Public Schools (NPS)
- **Wetlands Watchers** - 4th grade assembly in partnership with SPSA for NPS)
- **Green Reader Program** - Volunteers visit NPS elementary classrooms during the month of April to narrate and discuss environmentally themed stories
- **Eco-D.I.Y.** - Three fall sessions for residents on organic gardening, energy savings techniques and rain barrel construction
- **Nauticus Partnership** – Provide recycling program on-site at Nauticus for all NPS Kindergarten classes
- **BWET** – Partnership with Nauticus staff to visit all 6th grade NPS classrooms for water testing, education, etc.

MWEE Effort

- **BWET** – Partnership with Nauticus staff to visit all 6th grade NPS classrooms for water testing, education, etc.

Numbers of Students Reached

- Adults: 1,414
- Children/students: 6,384

Upcoming Projects

- **Kids Cleanup Crew** – Norfolk recreation centers receive a visit once a month, June-August, for their 9-12 year-olds. Students are given a presentation on litter/recycling, followed by a litter cleanup of the center site and a related activity.

Plans to encourage children and adults to get outside

- Working with NPS and City of Norfolk Parks & Recreation to develop Camp E.W. Young, a residential facility along the Elizabeth River in Chesapeake, owned by NPS. It is currently being used sporadically during the school year, but we are working toward developing programs that can be offered to all residents, transportation included – camps, overnights, family outings, boating, nature hikes, etc.

Challenges

- Staffing

Shenandoah National Park

3655 US Hwy 211 E
Luray, VA 22835



VRUEC Member

Timothy Taglauer, Asst. Chief, Interpretation & Education, 540-999-3488

Major Educational Efforts

- Completed a full schedule of spring and fall curriculum-based education programs. Hosted 5 teacher workshops for 70 educators.
- Produced two new units for the *Exploring Earth Science in Shenandoah National Park* curriculum guide.
- Produced an interactive CD-ROM companion to the Landforms and Life Forms unit of the *Exploring Earth Science in Shenandoah National Park* curriculum guide.
- Participated in a National Park Service Northeast Center for Education Services pilot project to develop and implement an assessment tool to evaluate park education programs. Results of the study indicated that the education programs are successful at meeting the needs of the teachers and are highly effective in teaching science concepts and resource stewardship.
- Continued the successful partnership with McGaheysville Elementary School with full participation by K through 5th grades on park education programs. 9th annual "Park Day" will be held at the school on May 25, 2007.
- Continued regional and national leadership in wilderness education: conducted *Leave No Trace* program outreach, wilderness resources outreach, and wilderness education training.

MWEE Effort

- The 6th grade program offered by the park is on Watersheds. The students sample macroinvertebrates to estimate the health of a park stream and examine the living and abiotic factors that impact the watershed ecosystem.
- Established a partnership with Luray High School, Page County Public Schools, on a *Virginia Learn and Serve* grant project to study local watersheds and related resource issues. Focus on using the park's new earth science unit that investigates the hydrology and source water quality in Shenandoah National Park.

Numbers Reached

- 70 Adults – Teacher workshops
- 4100 Children/students – on education programs
- 2231 – Junior Ranger programs

Current Projects

- Implementing "advanced" Junior Ranger program targeting audiences aged 14-adult.
- Developing a "GPS Ranger" program that uses global positioning system (GPS) technology and equipment. Visitors will be able to check out a hand-held GPS unit that stores electronic versions of interpretive hikes on selected trails in the National Park.
- Upgrading the "For Teachers" and "For Kids" sections of Shenandoah National Park's website to provide electronic access to information and educational materials.
- Revising the pre/post-visit curriculum materials for 2nd-6th grade education programs.

Challenges

- Our biggest challenge is to maintain the current level of educational programs and services in light of budget projections for federal agencies.

Virginia Association of Soil and Water Conservation Districts
7308 Hanover Green Dr., Ste 100
Mechanicsville, VA 23111



VRUEC Member

Dana Roberts, Education Coordinator (804) 559-0324
Executive Director

Major Educational Efforts

- Envirothon Program
- Agriculture Field Days & Conservation Farm Tours
- Soil and Water Stewardship Week
- Regional Educational Training Workshops for teachers and nonformal educators
- Scholarship Programs

MWEE Effort

- Soil and Water Conservation Districts provided MWEE to students through the provision of several programs including Agricultural Field Days, Environmental Field Schools, the Envirothon Program, Youth Conservation Camp, Kids in the Woods and Kids in the Wild Programs, Canoe Tours and classroom field trips.
- Regional Educational Training Workshops for teachers and nonformal educators

Numbers Reached

- Adults ~ 6,000 with Farm Tours; ~ 32,000 newsletter circulation and ~ 150 exhibits at community events and fairs
- Children/students ~ 1,000 school programs and ~ 10,000 attend field days

Upcoming Projects

- Youth Conservation Camp
- Natural Resource Conservation Week
- Environmental Educator Certification Program for Soil and Water Conservation District Staff
- State Fair Exhibit

Plans to encourage children and adults to get outside

- Outdoor Classroom Projects – new initiative by Education Committee
- Continue Field Days, Farm Tours and School Programs
- State Fair Exhibit

Challenges

- Funding for Soil and Water Conservation District Staff
- Funding for educational programs and materials



VRUEC Member

Michelle Prysby, 434/872-4580

The Virginia Master Naturalist Program is a corps of well-informed volunteers providing education, outreach, and service dedicated to the beneficial management of natural resources and natural areas within their communities for the Commonwealth of Virginia. At the state level, the Virginia Master Naturalist program is sponsored jointly by *Virginia Cooperative Extension*, the *Virginia Department of Game and Inland Fisheries*, the *Virginia Department of Conservation and Recreation*, the *Virginia Department of Forestry*, and the *Virginia Museum of Natural History*. The program consists of a network of Virginia Master Naturalist chapters across the state. We currently have 10 chapters, with 11 more chapters getting started in 2007. Each chapter recruits and trains volunteers and works with partners to create and coordinate volunteer service opportunities. To become a certified Virginia Master Naturalist, each volunteer must complete 40 hours of service. This service can be in the form of education (such as leading an interpretive program in a state park), citizen science (such as collecting data on wildlife populations), or stewardship (such as restoring a natural area).

Major Educational Efforts

- Virginia Master Naturalist Basic Training Courses: Since the program launched in Spring 2006, 12 basic training courses have been held in 10 communities across the Commonwealth. Each of these courses consisted of 40+ hours of classroom and field training in natural history and natural resources. The objectives focus on ecology, natural resource management, basic natural history of the animals and plants of Virginia, and skills for teaching and field research.
- Educational Programs by Virginia Master Naturalist Volunteers: One of the ways the volunteers can fulfill their service requirements for Virginia Master Naturalist certification is through educational programs. Each of our existing 10 chapters has had some volunteer-led education programs. Examples include a 4-H Junior Naturalists club, guest presentations in school classrooms, and leading nature walks and school programs in parks and natural areas.

MWEE Effort

- Virginia Master Naturalist chapters are encouraged to work with schools and community partners to offer or assist with MWEEs. Several chapters have been actively involved with MWEEs. For example, some volunteers with the Rivanna Chapter have been working with Chesapeake Bay Foundation to lead the field component of MWEEs for Albemarle County schools.

Numbers Reached

- Adults: ~300 adults have completed the basic training course and are working on volunteer service projects.
- Children/students: At this time, we do not have a count of all of the children reached through programs led by Virginia Master Naturalist volunteers. It is likely to be a large number!

Upcoming Projects

- Additional basic training courses: Courses will be offered over the next year at all of the original 10 locations, plus at 11 additional locations.
- Additional volunteer-led programs: We are offering advanced trainings to Virginia Master Naturalists to train them to lead educational programs about invasive species management and about wildlife habitat. Volunteers will also continue with their many educational efforts.

Plans to encourage children and adults to get outside

- Every basic training course spends 25% of the time in the field. We encourage our adult volunteers to become involved with 4-H, MWEEs, Project Wet/Wild/Learning Tree, and other opportunities to help youth spend time outdoors.

Challenges

- We are currently lacking a statewide database for tracking volunteer projects, hours, and contacts.
- It would be great if VRUEC agencies can continue reaching out to their local Virginia Master Naturalist chapter to involve the volunteers in projects.

Virginia Tech Science Outreach Program
VT STEM K-12 Outreach Initiative
Department of Geosciences
Virginia Tech MC 0420
Blacksburg, VA 24061
www.outreach.geos.vt.edu/
www.sten.vt.edu



VRUEC Member

Llyn Sharp, Geosciences Outreach Program Director, llyn@vt.edu

Major Educational Efforts

- field support for K-12 field trips
- field training for college students (GLOBE, Virginia/World Water Monitoring Day, and Virginia Save Our Streams)
- natural science interpretation and field training for New River Valley Chapter of Virginia Master Naturalists.
- Science, Technology, Engineering and Math (STEM) programming for teachers and K-12 students. Also presented a poster at the VT Environmental Forum on the strengths of using Environmental Education to lend personal relevance to STEM Education.

Numbers Reached

- University and Volunteer Groups 226
- K-12 and Community 581

Upcoming Projects

- Montgomery County Public Schools Watershed Service Learning Project with Middle and High Schools 2007-2008.
- New River Symposium May 31-June 1, 2007
- New River Watershed Groups meeting June 2, 2007

Plans to encourage children and adults to get outside

- outdoor field science programming
- input to VOP and regional planning groups for trails and open space
- grant proposals to develop outdoor learning labs and field sites
- Save Our Streams training and certification for New River Valley Master Naturalists Chapter and other New River Watershed Roundtable Citizen Science volunteers.